The Punjab Public School Nabha
Holiday Home Work
June-July, 2024
Class IX

ENGLISH

Do the following tasks in two separate files:

Language

1. Write two descriptive or narrative compositions of your choice. (300-350 words)

2. Write three notices and three emails of your choice.

3. Revise rules of Tenses & Transformation of Sentences.

Literature

1. Summary of Act-1 and Act-2 of "Julius Caesar" by William Shakespeare.
(400 words)
2. Summary of poem "Skimbleshanks: The Railway Cat" by TS Eliot. (400 words)
3. Summary of short story "Oliver Asks for More" by Charles Dickens. (400 words)

Note:

1. Please solve **English Language** and **English Literature** papers of **Unit Examination** in your Notebook.

2. The Project must include a Cover Page, Acknowledgement, Index and Bibliography

BIOLOGY

1.Make a PPT on the given topic.
   (a) Vaccine
   (b) Immunization
2.Collect the leaves of any 10 dicot and monocot plants in yours surrounding
   and fix in a herbarium
   Sheets with following information:
    (i) Name of the plant in English, Punjabi, Hindi and scientific name.
   (ii) Date and time of collection.

CHEMISTRY

Solve unit test question paper in your chemistry holiday notebook.

2.   Write valency chart 5 times in your chemistry holiday notebook and learn it.

3.   Write down exercise question answer of the chapters:
(i) Language of chemistry
(ii) Chemical changes and reactions

4.   Write down the chemical composition of twenty substances used in everyday life
For example: soap, perfumes, detergent, toothpaste etc.

5.   Read and learn the chapter "Atomic structure and chemical bonding"

6.   Research about the following medicines (Write down definition, use and examples)
(i) Antacids (ii) Analgesics (iii) Antipyretics (iv) Antibiotics
(v) Antihistamines.

GEOGRAPHY

Students have been instructed to prepare project work on ONE of the following topics:

1. Find out the sources of pollution of Water Bodies in your locality and determine the quality of water. Suggest ways to improve the quality of water in your locality. You can mention the measures that government and your society can take in order to do the same.

OR

2. Meteorological Instruments.
- Six's maximum and minimum thermometer
- Mercury Barometer
- Aneroid barometer
- Wind vane
- Anemometer
- Rain Gauge • Hygrometer

Draw diagrams of each of the instruments mentioned above and explain their working. Also discuss the precautions that must be take while their installation. State their uses as well.

INTRUCTIONS:
- Project work has to be submitted in a separate file.
- First page should provide your personal information.

- Second page should show the content (index).
- Draw margins on both sides of the sheet.
- Sheet number should be written on the right corner of the sheet.
- Use pencils/colours to draw the diagrams.
- Use diagrams/tables/illustrations wherever required.
- Do not use photocopied pictures.
- Project work must have an introduction and conclusion.
- Students are required to solve **Unit Term 2024 Question Paper**(Geography).
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HISTORY & CIVICS

Questions and Answer of Chapter:

Jainism and Buddhism(Short type and Long Type)

Project Work on any one topic.

a. Visit to Historical Site

b. Election of 2024

HINDI

परियोजना कार्य- 2024

कक्षा: नौवीं

विषय: हिंदी

1 वे किताबें जिन्हें आप पढ़ना पसंद करते हैं। आप उन्हीं विशेष प्रकार की किताबों को ही पढ़ना क्यों पसंद करते है? उन किताबों का आपके जीवन पर किस तरह का प्रभाव पड़ता है?

2 पर्यटन या भ्रमण भी शिक्षा का एक भाग है। कोई भी शिक्षा पर्यटन के बिना पूरी नहीं कि जा सकती। इससे व्यक्ति को किस-किस प्रकार के अनुभव होते हैं और उनसे वह अपना ज्ञान किस प्रकार बढ़ाता है?

3 मनुष्य अपने मित्रों के द्वारा ही जाना जाता है। उसके मित्रों का चयन ही उसके व्यक्तित्व का मापक है। व्यक्ति के जीवन में उसके मित्रों का क्या महत्त्व है और वे उसके जीवन को किस प्रकार प्रभावित करते हैं?

4 एक मौलिक कहानी लिखिए- एक और एक ग्यारह।

5 किसी कारण आपका मन कक्षा में नहीं लग रहा है, लेकिन अध्यापक की डाँट के डर से आप पढ़ाए जा रहे पाठ को मजबूर होकर चुपचाप सुन रहे हैं। अपनी बड़ी बहन/भाई को पत्र लिखकर बताइए कि आपका मन कक्षा में क्यों नहीं लग रहा था, उस समय आप क्या सोच रहे थे?

6 आपके बैंक की चैकबुक कहीं खो गई है। अपने बैंक के महाप्रबंधक को पत्र लिखकर इसकी सूचना दीजिए।

नोट:- परियोजना कार्य जांच के मापदंड

- कार्य स्वच्छ, त्रुटिरहित एवं स्वयं से किया गया हो।
- कार्य की जांच अभिव्यक्ति, सरल भाषा, व्याकरण की विभिन्न विधाओं के प्रयोग, विचारात्मक भाव को ध्यान में रख कर किया जाएगा।

परियोजना कार्य जमा करने की अंतिम तिथि 02 अगस्त 2024 है।

PUNJABI

ਨੋਟ :-ਲਿਖਾਈ ਸਾਫ਼ ਅਤੇ ਸੁੰਦਰ ਕਰੋ।

1. ਹੇਠਾਂ ਦਿੱਤੀ ਤਸਵੀਰ ਨੂੰ ਦੇਖ ਕੇ ਤੁਹਾਡੇ ਮਨ ਵਿੱਚ ਜੋ ਵਿਚਾਰ ਪੈਦਾ ਹੁੰਦੇ ਹਨ , ਉਹਨਾਂ ਵਿਚਾਰਾਂ ਨੂੰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ ।

2. ਤੁਸੀ ਆਪਣੀਆਂ ਛੁੱਟੀਆਂ ਕਿਵੇਂ ਬਿਤਾਈਆਂ? ਲਗਭਗ 500 ਸ਼ਬਦਾਂ ਵਿੱਚ ਉਲੇਖ ਕਰੋ।

3. ਵਿਦਿਆਰਥੀ "ਇੱਕ ਚੁੱਪ ਸੌ ਸੁੱਖ" ਵਿਸ਼ੇ ਉੱਪਰ ਕੋਈ ਮੌਲਿਕ ਕਹਾਣੀ ਲਿਖਣਗੇ।

4. ਕਿਸੇ ਵਿਆਕਰਨ ਪੁਸਤਕ ਵਿੱਚੋਂ ਕੋਈ 50 ਮੁਹਾਵਰੇ ਲਿਖੋ।

5. ਆਪਣੀ ਪਸੰਦ ਦੇ ਕੋਈ 2 ਵਿਸ਼ਿਆਂ ਉੱਪਰ ਲੇਖ ਲਿਖੋ।

6. ਵਿਦਿਆਰਥੀ (UNIT TEST) ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਨੂੰ ਲਿਖਤੀ ਰੂਪ ਵਿੱਚ ਹੱਲ ਕਰਨਗੇ।

ਛੁੱਟੀਆਂ ਦੇ ਕੰਮ ਲਈ ਨਵੀਂ ਫਾਇਲ ਦੀ ਵਰਤੋਂ ਕੀਤੀ ਜਾਵੇ।

MATHEMATICS

Instructions: *1. All the projects to be done on a separate file.*

2. The front page should carry your details e.g. Name, House Number, Class & Section, name of the teacher, session etc.

3. Your project should include: an introduction, findings, analysis, conclusion, acknowledgement and bibliography.

4. Do any two projects.

1. Conduct a survey of a group of students and represent it graphically - height, weight, number of family members, pocket money, etc.
2. Planning delivery routes for a postman/milkman.
3. Running a tuck shop/canteen. ♣ Study ways of raising a loan to buy a car or house, e.g. bank loan or purchase a refrigerator or a television set through hire purchase
4. Draw a circle of radius r on a ½ cm graph paper, and then on a 2 mm graph paper. Estimate the area enclosed in each case by actually counting the squares. Now try out with circles of different radii. Establish the pattern, if any, between the two observed values and the theoretical value (area = πr^2). Any modifications?

COMPUTER APPLICATIONS

Project Work : Computing and Ethics

The class will be divided into 10 groups. Each group will first read the chapter 'Computing and Ethics' and then make a PowerPoint presentation giving details of the following and any other information / pics / diagrams you want to add.

a. Introduction to Ethical Issues in Computing.

Intellectual property rights; protection of individual's right to privacy; data protection on the internet; protection against Spam; software piracy, cybercrime, hacking, protection against malicious intent and malicious code. The stress should be on good etiquette and ethical practices.

b. Research the case study of the following cyber-attacks and data breaches worldwide and do the following:
    i.   Analyze the incident
    ii.   Identify the vulnerabilities or mistakes that led to the attack
    iii. Propose measures that could have prevented or mitigated the impact.
    iv.   To conclude, highlight the importance of robust security measures, proactive detection, and timely disclosure to protect sensitive information and mitigate potential harm.

Group 1 : Equifax (2017):

Equifax, one of the largest credit reporting agencies, experienced a significant data breach in 2017. The breach exposed personal information, including names, social security numbers, birth dates, and addresses, of approximately 147 million consumers. The breach was attributed to a vulnerability in the company's web application software.

Group 2 : Yahoo (2013-2014):

Yahoo, the multinational technology company, suffered a massive data breach between 2013 and 2014, but it was not publicly disclosed until 2016. The breach affected around 3 billion user accounts and involved the theft of sensitive information, including names, email addresses, phone numbers, and hashed passwords.

Group 3: Marriott International (2014-2018):

Marriott International, a global hotel chain, experienced a long-running data breach that started in 2014 and remained undetected until 2018. The breach compromised personal information, such as passport numbers, names, addresses, and reservation details, of approximately 500 million guests.

Group 4 : Facebook-Cambridge Analytica (2018):

In 2018, Facebook faced a major data breach involving the personal data of millions of its users. The breach occurred through an app developed by Cambridge Analytica, a political consulting firm. The app collected users' data without their consent, resulting in the unauthorized access and misuse of personal information for targeted advertising and political purposes.

Group 5: Aadhaar (India's Unique Identification Program) (2018):

India's Unique Identification Program, known as Aadhaar, faced multiple data breaches in 2018. Aadhaar is a biometric identification system that stores personal information, including biometric data and demographic details, of Indian residents. The breaches exposed millions of Aadhaar numbers and raised concerns about the security and privacy of the program.

Group 6: WannaCry Ransomware (2017):

In May 2017, the WannaCry ransomware attack affected hundreds of thousands of computers worldwide. The attack exploited a vulnerability in the Windows operating system and spread rapidly across networks. It encrypted files on infected systems and demanded a ransom in Bitcoin for their release. The attack impacted various organizations, including hospitals, government agencies, and businesses, causing widespread disruption and financial losses.

Group 7: SolarWinds Supply Chain Attack (2020):

Discovered in December 2020, the SolarWinds cyber attack was a sophisticated supply chain attack that affected numerous organizations, including government agencies and major

technology companies. The attackers compromised the software build and distribution system of SolarWinds, a prominent IT management software provider. They injected malicious code into the software updates, allowing them unauthorized access to the networks of organizations that used the compromised software. The attack remained undetected for several months, highlighting the complexity and stealth of the intrusion.

Group 8 : Sony Pictures Entertainment Hack (2014):

In 2014, Sony Pictures Entertainment became the victim of a highly publicized cyber attack. The attack, attributed to a group known as Guardians of Peace, resulted in the theft and release of sensitive data, including internal emails, employee records, and unreleased films. The attackers targeted Sony Pictures' network infrastructure and exposed confidential information, causing reputational damage and disrupting the company's operations.

Group 9: NotPetya Malware (2017):

In June 2017, the NotPetya malware targeted organizations primarily in Ukraine but had global ramifications. The malware disguised itself as ransomware but was designed to spread rapidly across networks. It leveraged the same vulnerability as WannaCry and caused significant damage to numerous multinational companies. NotPetya disrupted operations, crippled IT infrastructure, and resulted in substantial financial losses.

Group 10: SolarWinds Supply Chain Attack (2020):

Discovered in December 2020, the SolarWinds cyber attack was a sophisticated supply chain attack that affected numerous organizations, including government agencies and major technology companies. The attackers compromised the software build and distribution system of SolarWinds, a prominent IT management software provider. They injected malicious code into the software updates, allowing them unauthorized access to the networks of organizations that used the compromised software. The attack remained undetected for several months, highlighting the complexity and stealth of the intrusion.

Read the chapter, do the question answers of the chapter (computing and ethics) in the notebook.

There will be MCQ test on the above chapter on reporting after break. The presentation and test will be marked out of 50 and will be added to your mid – term results.

2.   Solve the Unit – Exam Paper in your fair notebook.

The presentation, Q/A and Unit Test solution should be mailed to your respective teachers at maninder.singh276@gmail.com by 20th July 2024. [Any presentation found copied will be awarded 0]

ECONOMIC APPLICATION

- Students are required to prepare the following project works.

- **Topics for the projects are.**

1. Take a fast-moving consumer good (FMCG) like soap, shampoo, washing machine etc.
   Analyze their demand, price, advertisement and compare their main features and qualities.

2. Take USA as developed and India as developing country. Make a comparison of both the economies in detail.

- Project work to be done on a project file and should not be less than of 10 pages.

- **IMPORTANT NOTES**

  1. First page of the project file will show the name of the school, student's name and Project name.
  2. Page no. 2 will be showing Index.
  3. Content of the project in minimum 10 pages.
  4. Bibliography at the last page.
  5. All the work should be neatly handwritten.

COMMERCIAL APPLICATIONS

Assignment#1

<u>Sectors of Indian Economy</u>

Prepare an assignment on sectors of Indian economy, and their relative importance.

Primary sector – Meaning, activities, contribution to GDP since 1980

Secondary sector – Meaning, activities, contribution to GDP since 1980

Tertiary sector – Meaning, activities, contribution to GDP since 1980

- Present your information through bar graphs or pie-charts

Conclude your assignment by highlighting the rising importance of tertiary sector and how it is likely to be the major contributor to the Indian economy in the future.

Assignment#2

<u>Entrepreneurship</u>

Find someone in your family/known to you, who set up a sole-proprietorship business a few years ago. Request for an appointment and meet them with a diary and pen. Ask them the following questions, and present the answers in the form of an assignment

- Year of setting up the business
- Occupation before starting the business
- Reason for starting business
- Details about the business (manufacturing or trading etc)
- Planning and research that was done before starting the business
- Resources required, and from where they acquired
- Challenges faced before starting the business
- Challenges faced within one year of starting.
- A brief summary of progress since starting the business
- Future plans
- Advice for those who are planning to be entrepreneurs

Conclude your assignment by identifying the personality traits of a successful businessman/entrepreneur.

Note: Each assignment must be minimum of 10 pages

PHYSICS

❖ Instructions:
- A, B & C are mandatory for all students. These are to be documented in your class-work notebooks.
- D, E, F, G, H, I and J are assigned as conveyed in the class. The students have to perform, analyse and document them accordingly.
- The content of the project must contain the following:

1.	Title and Abstract (summary)
2.	Introduction/purpose
3.	Contents/Presentation
4.	Analysis/ material aid (graph, data, structure, pie charts, histograms, diagrams, etc.)
5.	Originality of work
6.	Conclusion/comments

❖ **Holiday Homework:**

A. Re-attempt the Unit Term Examination Question Paper.

B. Complete the numerical exercises from the chapters completed in the class during the month April-May 2024-25.

C. Read the chapter:

      a) Pressure in fluids and Atmospheric Pressure

❖ **Project Work/Assignments**

The students are requested to perform the project assigned during their holidays and prepare a report/presentation as instructed.

D. **Motion**:

- Research and create a presentation on different types of motion (e.g., uniform motion, non-uniform motion, circular motion, etc.). Include real-life examples and pictures/animations to illustrate each type of motion. (Graphical and mathematical analysis is also required).

E. **Newton's Laws**:

- Conduct an experiment to demonstrate Newton's first law of motion (law of inertia). You can use simple materials like marbles, a smooth surface, and different objects of varying masses to observe the effect of inertia.

- Write a short essay discussing Newton's second law of motion and its applications in daily life. Provide examples to explain how force, mass, and acceleration are related according to this law.

F. **Measurement and Instrumentation**:

- Design a simple experiment to measure the acceleration due to gravity using a pendulum. Record your observations, measurements, and calculations, and analyze the results. (Make a DIY simple pendulum using household objects & measure the time using a stopwatch)

- Create a poster or infographic illustrating different types of measuring instruments (e.g., rulers, Vernier callipers, micrometers, etc.) along with their uses and limitations. Include labelled diagrams and explanations for each instrument. (Information regarding at least 10 instruments used in Physics Laboratory required).

G. **Application of Physics in Sports**:

- Choose a sport of your interest (e.g., basketball, football, swimming) and investigate the physics principles involved in it. Discuss concepts like projectile motion, friction, momentum, and center of gravity as they relate to the chosen sport.

- Present your findings creatively, using a combination of text, diagrams, and multimedia elements. You can prepare a video presentation, a poster display, or a live demonstration to showcase the physics behind the sport.

H. **Newton's Laws in Action**:

- Select three real-life scenarios where Newton's laws of motion are at play (e.g., car safety features, roller coaster rides, space exploration). Analyse each scenario in detail, identifying the relevant law(s) and explaining how they apply.

- Create a multimedia presentation or a written report documenting your analysis, including diagrams, photographs, and videos if possible. Discuss the significance of understanding Newton's laws in designing everyday objects and technologies.

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